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Wildlife

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# Virginia Wildlife

*Dedicated to the Conservation of  
Virginia's Wildlife and Related Natural Resources  
and to the Betterment of  
Outdoor Recreation in Virginia*

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**PUBLICATION OFFICE:** Commission of Game and  
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**COVER:** A stream fish whose preferred habitat is similar to that of the smallmouth bass, the rock bass is a favorite panfish of Virginia's mountain and upper Piedmont regions. Look for him in a relatively deep hole where a moderately strong current is broken by a rocky outcrop. Our artist: Duane Raver.

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## Wardens Deserve Recognition

By GLENN C. WELDEN, *President*  
*Virginia Division, The Izaak Walton League of America*

HAS your chapter taken time to officially honor your local Game Warden? If not, why not?

These men of green play many and varied parts in our field of conservation. Some look upon them as that policeman of our woods and streams; some see them as that friend who helps to inform them on places to fish and hunt; some use their less informed friends to act as lookouts for that Warden while they display their skills as poachers; some know him, the local Warden, as a teacher, instructor and friend.

Our Wardens are the most informative and helpful individuals that we could expect to meet when enjoying a legal fishing or hunting expedition. They give freely of their off duty time to give assistance in the instruction of gun safety programs and in the instruction of the varied aspects of the field of conservation. Our Wardens often spend untold numbers of hours to locate and bring to justice those few who believe in defying the laws which we law-abiding citizens insist upon.

In this modern day of expanding population and the outward pressures of urbanization, we of Virginia can be thankful for the opportunity to be able to enjoy the out-of-doors in its finest. We can also be proud for our mountain streams and forests, and the opportunity to try our skill for that elusive gobbler, bird on the wing, buck or bear, or, to spend a quiet day on our favorite stream and lake awaiting a sudden strike from that trophy fish. Yes, even though we often complain, we are very fortunate that we have these thrilling and relaxing moments to enjoy.

Could these be possible without an active and growing program by our Commission of Game and Inland Fisheries, and the many scientific and educational personnel involved?

That man of the Commission we most often meet in the school, meeting places and in the field is our local Game Warden. Have you honored him lately?

From *The Conservation Record*, May 1968, official publication of the Virginia Division, The Izaak Walton League of America.

## LETTERS

### Missed the Point

CONCERNING the letter in your May issue about returning Virginia to wilderness, I am afraid the author has missed the point of conservation. It is not to return the land to its original condition, but to make the best possible use of what is available. Man is not here to preserve what God has given but to use these gifts in his best interests.

Though I feel no species should be brought to extinction, we must decide which animal will provide the most benefits in a given area. For this reason your magazine was perfectly right in posing the question, "Should We Manage the Black Bear?" Furthermore, I feel your magazine has done a marvelous job of raising interest in wise wildlife management.

Kenneth P. Mergenthal  
 Falmouth

### Wants Foxes Around

I have been a supporter and student of *Virginia Wildlife* since I was fourteen years old. I have followed the laws and your suggestions for the conservation of wildlife, but I was never so shocked as to see the picture you published in May of W. A. Kindervater and his slaughter. I see Mr. Kindervater uses the excuse of a scarcity of rabbits. If his farmer friends would give wildlife a helping hand by providing brush piles, hedgerows and a little food, and leave nature alone in the field of predators, their rabbits and birds would increase by leaps and bounds.

Yes, I am a fox hunter, but I have yet to nail a fox tail on my dog pen. I want foxes to stay around for awhile. I say that foxes would not be here if they did not have a purpose. Tell Mr. Kindervater's friends they had better get a good supply of mouse and rat traps.

Lynwood Slayton  
 Richmond

### Trophy Contest Entry

This past hunting season I was one of the fortunate hunters to bag a rather large buck. Needless to say I was quite excited upon finding such a large set of antlers. The spread measured 22" on the inside with tines averaging about 8". I shot this deer on November 25, 1967, in Fluvanna County about 2½ miles below Palmyra in an open field and without the use of dogs.

My reason for writing is to find out how I can enter this deer in the Eastern Regional Trophy Contest. Any information you can provide concerning this matter will be greatly appreciated.

Winston L. Sides  
 Vienna

*Plans for this year's trophy contests have not yet been officially announced. We will probably have the information on one of our back covers about September or October. Last year the Western Regional Contest was held October 19, 20, and 21 at Harrisonburg, and the Eastern Regional and State Contests were at Municipal Armory, Newport News, October 28. This year the Eastern Contest probably will be held first, with the State Contest about a week later in conjunction with the Western Regional Contest at Harrisonburg.*  
 —Ed.



# The Thirtieth Year

By J. E. THORNTON  
Supervising Biologist  
and  
E. V. RICHARDS  
U. S. Forest Service

**C**OOPERATIVE wildlife management on Virginia's National Forests is celebrating its 30th anniversary. A big, bold, two column headline announced the beginning:

## National Forest Plan Creates Huge Public Hunting Ground

### Cooperative Wildlife Management Agreement Signed by Commission and Forest Officials

It was June, 1938. On July 1 the new \$1.00 National Forest Permits would be required of hunters and fishermen using the Forest lands, and the money they produced would be used to finance the joint management of fish and wildlife resources on Virginia's two National Forests.

The wildlife management area thus created, the news story said, comprised 1,400,000 acres and exceeded in size any similar area east of the Mississippi River open to and managed for public hunting. Plans for developing the area wildlife resources were included in the agreement, and covered the release of deer and turkeys in unstocked range, habitat improvement, and intensive protection. Management plans were based on results of experimental work that had been done on the Big Levels refuge and in other forest areas. These experimental activities, which included clearing small openings in the forest cover, planting wildlife foods, intensive patrolling to prevent poaching, and protection from free running dogs, were reported to have trebled the number of turkeys, grouse and deer on the 30,000-acre experimental refuge. Now a bold new step was being taken to bring similar results to all the National Forest land in the state.

Wildlife experts were reported at the time to have regarded the "Virginia Plan" as being an outstanding development in wildlife restoration, and to have expected it to do much toward solving the growing problem of providing public hunting and cold-water stream fishing.

This once unique but now much copied relationship between State and Federal agencies has brought wildlife populations on Virginia Forests from a status of near extinction to one of record abundance. What few deer there were existed as pitiful remnants of original herds, isolated in a few inaccessible localities, with no apparent possibility of increasing their numbers and reclaiming any of their lost range. For all practical purposes deer and deer hunting had been eliminated west of the Blue Ridge where most of the National Forest lands lie. But the deer and the sport of deer hunting have been restored, and the annual western harvest is now running about 12,000! The status of the wild turkey, and its outlook for the future, was no less bleak than that of the deer. But this, too, has changed and the mountain areas in and around the National Forests have now taken over from the Central Piedmont region as the most productive wild turkey range in Virginia.

An indication of the success of the thirty-year-old cooperative plan lies in the increased utilization of the National Forests by hunters and fishermen. Back in 1938-39 about 12,000 hunters and fishermen bought National Forest

permits. Now there are some 124,000 of these permits sold annually. It might be argued that such an increase merely reflects the increase in people, or in people who hunt and fish, but that is not the whole story. The total number of licensed hunters and fishermen in Virginia has increased from about 155,000 to about 750,000, or by a factor of about 5, while those who use the National Forests to hunt and fish have increased by a factor of nearly 10. To put it another way, back when the cooperative plan was first put into effect, about 8% of Virginia's licensed hunters and fishermen used the National Forests in pursuit of their sport, while now over 16% of those who hunt and fish in Virginia do so on the cooperative area. The Forests are at least twice as important to hunters and fishermen as they were, and much of the credit for this success story goes to farsighted Forest Service and State Game Commission personnel who, thirty years ago, envisioned a public hunting and fishing mecca at a time and in an area in which it might have seemed that these sports were on their way out.

Almost everything that happens has its roots in past history, and so it was with the cooperative agreement in 1938. By the turn of the century, the Virginia Appalachians had felt the bite of the logger's axe and most of the rich virgin forest had been felled. Without the protective canopy of trees, the soil became subject to erosion. Rainwater, without forested watersheds to hold it back, rushed in silt-laden torrents down the stream beds scouring away aquatic food and cover. Fires burned through slash and underbrush. Remaining wildlife was hunted relentlessly.

Early conservationists looked on all this with dismay and from about 1900 they exerted increasing pressure on legislators to do something about it. In 1911 the Weeks Law was passed providing for the creation of National Forests in the interest of the general public. Permissive State legislation authorized numerous purchase units in Virginia which were later reorganized and expanded to form the 547,000-acre Jefferson National Forest in Southwest Virginia and the

Forest wildlife populations are largely a product of forest edge. The creation and maintenance of openings in the forest was one of the major early wildlife developments.

U. S. Forest Service photo by Richards







910,000-acre George Washington National Forest to the north. Fire prevention and the re-establishment of vegetative cover were the immediate objectives. The eventual re-establishment of an economically valuable forest and watershed was the long-range plan.

As manager of the land, the U. S. Forest Service began the task of rebuilding the soil and vegetative cover, but State laws governing hunting and fishing still applied here, as they do elsewhere, regardless of land ownership.

Although early cooperation regarding game and fish management on the Forests was strictly founded on mutual good will, it was effective enough that sportsmen could see its merit. The very first experimental deer stocking took place in the late twenties and early thirties, and established a few small herds, demonstrating that deer could be brought back in this manner. Refuges were set up, to protect newly stocked game from poachers and free running dogs. Small-scale, experimental forest habitat improvement innovations were undertaken. All these initial cooperative efforts looked promising, but to extend them to the whole 1,400,000 acres of forest land would require cooperative funds, and the proper administration of those funds would require a formal cooperative agreement. The Virginia General Assembly provided the source of cooperative funds when it established the \$1.00 National Forest Permit, and the formal agreement stipulated that the funds were to be spent for projects mutually agreed upon by the Forest Service and the Game Commission.

Perhaps the most significant point of the agreement was the decision to manage game and fish on the forests as a perpetual annual crop. Previous emphasis had been on stocking and protection, with less effort devoted to habitat development largely because of lack of funds. There were by then 21 small, separate, struggling deer herds widely scattered throughout the whole of western Virginia. With the formal cooperative agreement came the goal of expanding these herds until they joined and comprised a vast, huntable deer herd covering the entire 1,400,000 acres.

At the outset wildlife management on the Forests was crude and clumsy by today's standards. Clearings were hacked out with hand tools in much the same way as the early settlers had carved their homesteads from the wilderness.

As it was recognized by this time that forest wildlife is generally a product of the forest edge, the establishment and maintenance of clearings was one of the most important parts of the early wildlife developments. Some of these were classified as "agricultural clearings" and were seeded to wildlife food crops. Others were just forest openings or slashings to encourage natural low-growing food

plants. These had to be cut back periodically to prevent their return to forest cover. The poor waterholding ability of the young forest coupled with severe drought in some years made waterholes a desirable wildlife development. These were incorporated with clearings wherever possible.

Since natural plant succession tended to close forest openings rapidly, logging roads and log landings were seeded to grass and de-brushed regularly to keep them open. Trails were developed to create openings and to facilitate hunter access. Abandoned farms were cultivated and kept clear of brush.

A great deal of planting was done in the early phases of the program to increase and improve the distribution of desirable food and cover plants. Pine trees and other conifers were planted where cover was needed. Fruit trees, nut trees and grapevines were planted and encouraged throughout the forest.

During the fifties the main trend was toward mechanization of game management development work. Farm tractors and bulldozers replaced hand tools, and the game managers outfitted with this new equipment accomplished much more than they had been able to before. As the scope of the work caught up with available funds, emphasis changed from a program of broad-scale new developments to one of maintenance and improvement. Game species had reached a rather uniform distribution, and stocking and transplanting

(Continued on page 23)

The gray squirrel is the number 1 small game species hunted on Virginia National Forests.

U. S. Forest Service photo, Harrisonburg





# CHASING TROUT FOR A WEEK

By OZZIE WORLEY  
*Roanoke*

**D**O they *REALLY* catch all of the trout except a few strays on opening day?

I took a week's vacation this year to find out. I sampled ten streams, beginning on the Monday following the April 6 opener. Except for a few isolated cases, the water was mine.

Whether it was luck, fate or perseverance I can't say, but I landed *SOME* trout each day. I even picked up the day's limit of eight at midweek.

From where I live, you can head out in just about any direction and be on trout waters in an hour or so. Therefore, I simply tossed a coin each morning to decide which stream to fish. That's how I wound up on Howells Creek, a relatively small stream that meanders through woods and meadows a few miles south of Floyd, Virginia.

I had bargained that Howells would be nearly barren of stocked trout, but gambled that native trout might be enticed to strike.

Two did. They were only three or four inches long, but their fiery markings compensated for their size. I admired their coloration, and released them—tenderly.

Around a bend in the creek, where debris collects when the stream runs high, I approached a pile of brush and tree limbs. A small animal darted from the creek's edge to the security of the mass of brush. It had spied me before I did it.

Whatever the animal was—and I never got close enough to identify it—it carried one of its young in its mouth as a cat does a kitten. The animal was black, seemed to be some-

Jennings Creek, one of the streams I fished during the week following opening day.



Three browns and one rainbow caught on one day's outing.

what smaller than a Chihuahua and short-haired.

As I neared, it apparently hid its baby, because it snaked its head up and down behind some limbs, watching me suspiciously as I waded by.

Several hundred feet from this encounter, I climbed upon a wooden bridge that carried the dirt secondary road over the creek. Beneath the span was a small pool that was dark green at the end, signaling it was deepest there.

Looking down to size it up, I speculated that scores of lines had searched it out for trout since opening day. Nevertheless, I gave it a whirl.

At the instant that my line traveled to the deep place, a rainbow crashed into the bait while it twitched on top of the water. I struck. I hooked the trout well, and it shot upstream into the shallow end of the pool. I played it for awhile and reeled it up to where I stood on the floor of the bridge. The rainbow was about 12 inches long and well colored.

I saw another smaller one in the same pool. But the thrashing of its departed brother frightened it. Giving up on this one, I waded downstream toward my car. I picked up a small rainbow—which I turned loose—while en route.

I stumbled over rocks and sneaked up on a half-dozen more pools. By the time I reached the car, I was pooped—and hungry. I fished a tin of sardines from the trunk.

I'd taken only a few bites when a car eased up the road and parked in front of mine. The driver got out and walked towards me. His billed cap and green uniform gave him away. It was a game warden.

He introduced himself as John West, the Floyd County warden. After we exchanged some pleasantries on the state of fishing, the weather and the like, West gave me a tip that led to the best trout fishing I had the entire week.

He recommended a stream, off State Route 8 between Floyd and Christiansburg, that he said had not had a great deal of fishing pressure. He couldn't understand why. But I think that I found the answer. The dirt road leading to it was under construction.

When I got there, I found the old roadbed being ripped up. There had been dynamiting and chunks of rock and tree roots were in the road. Heavy earth-moving equipment crawled along the side of a hill, carving a new right of way.



I was grateful that I had not removed my snow tires. I might not have made it past the construction without them. It was bump-bump-bump, with the car sliding along at odd angles, as I eased through.

Dusk was nearing by the time I arrived at the section of the stream to which Warden West had steered me. I was the only fisherman there.

My first glimpse of the stream convinced me that it cried out for the use of spinners. Subsequent events proved me right.

Unloading from the car quickly, I hurried to the edge of the stream. I saw that I'd have to wade across and cast to the side running along the road. I picked a place that looked shallow enough to ford on foot. The clear water was misleading. It trickled into the tops of my waders as I slogged across.

Although water was squishing in my boots, I pushed on toward the best looking hole below where I crossed. It was an ideal spot for trout—swift water forming a neck that led to still, deep water. I got my first strike at the beginning of the quiet water.

I cast a spinner toward a rock on the far side and cranked my reel slowly, letting the water do most of the twirling of the spinner blade. When it was about two feet beyond the rock, a fish slammed into it. It had to be a trout. It cleared the water in a spectacular leap.

It was obstinate, pulling and jumping like a recalcitrant steer on the end of a tight rope. I was forced to use my landing net to put the skids on this fellow. He was a fat brown trout, about 16 inches long—and the best I'd hooked since the season opened.

Throughout this pool, which was 30 or 40 yards long, I enjoyed the same sort of exciting action. Before I finished with it, I had seven fine trout, both browns and rainbows, in my creel. These, plus the single I'd caught under the bridge on Howells Creek rounded out my limit for the day.

You'll notice that I have carefully avoided naming this stream. This is not inadvertent. I want to go back again—by myself if I can. I trust that Warden West can keep a secret, too.

If this day on stream "X" was my finest, a couple of

others devoted to streams in the Jefferson National Forest were my poorest. The trout stocked in the forest creeks—from federal hatcheries—did not measure up to those from the state hatcheries. On Barbours Creek in Craig County, for example, I caught stocked rainbows that weren't much bigger than the two natives I hooked on Howells Creek.

The trout in North Creek, near the Arcadia community in Botetourt County, were equally as small. They were stocked from federal sources, too.

There was no question about what my most unusual experience of the week was. It occurred on the Bullpasture River in the Highland County mountains near Williamsville. To give you an idea what sort of a day it was, a native of the area informed me there'd been snow in Monterey that morning.

I was fishing below a small dam, and had caught one medium-sized rainbow. Without warning, my line hung up—like it had snagged moss or grass on the bottom of the river. Each time I yanked, the line gave a little. I was encouraged that it would come free.

I continued to pull and retrieved more line. The moss, or whatever it was, was coming toward me with my line.

When I got the line near enough to see what I had, my mouth flew open. I had no moss, no grass, no old boot. I had hooked a piece of broken fishing line. And on the end of it was a struggling rainbow trout.

The only thing I could conclude was that somebody had hooked it earlier in the season—perhaps on opening day—and had been forced to break the line. It was the easiest catch of my fishing career.

The lowest number of trout I hooked on any one day was three.

The reports were right—up to a point. The stocked trout are pretty well dented after opening day. But there are some side benefits to fishing when nearly everyone else is working.

For one thing, I could pause to watch the woods dress up in their fancy duds again.

And—paramount—I had places like Johns Creek, Cove Creek and stream "X" practically to myself!

North Creek, one of the streams where the trout were small.



# Nature's Successful Nitwits

When one considers almost any of Nature's wilderness children, the fox, deer, turkey buzzard, he is awed by the keen special senses with which they have been endowed. Man's abilities—sight, smell, touch, hearing, and taste—pale in comparison. There are some notable exceptions, and Nature, as sort of an afterthought, compensated these dim-witted ones with protective devices that make it possible for them to hold their own in the animal world.

By CARSTEN AHRENS

Illustrations by Karen Ahrens DeStefano

FROM the age of eight until it was time for me to leave for college, I spent a part of each winter's day on my trap line. Father had a ruling that if traps were set, they had to be tended daily; it's a good and humane rule.

I caught muskrats by the scores, many skunks, and enough minks and raccoons to keep me clothed and to build a tidy college fund.

During my junior year in high school, the winter was unusually mild and a good one for trapping skunks. Dozens of pelts of the black and white beauties hung drying from the beams in the smokehouse.

There was an old barn for machinery and excess hay in a field far back on the farm, and most of my specimens of *Mephitis mephitis* were caught in traps set in openings through its foundation. I always rode horseback to and from the back barn and tried to carry my dead captives so that the wind didn't blow from the skunk towards me. I'd leave the furbearers in the barn where they wouldn't freeze, hurry and wash, change clothes, and get on to Lakeside High four miles away.

One morning after catching a large skunk, I met the head of our school as I entered. His nostrils didn't even dilate. He was a man of few words and his greeting was, "Have much white on it?"

"Just two, short, thin lines." (The more white the less value.)

"Good," he replied, and that was all.

Some years ago I was teaching in Gladstone School in Pittsburgh when a youngster tangled with a skunk on his way to classes. (Oh, yes, many animals usually considered wild have adapted themselves to city life and skunks avidly take to a garbage pail diet.) News about the boy-skunk confrontation beat the lad to school and Principal Cresswell came down the front steps to meet him. The principal gave the perfumed pupil the day off with suggestions for deodorizing his clothing. I once had a list of 18 rural suggestions for removing skunk aroma from clothes; in a direct hit, I doubt if any of them would be truly effective.

I've often pondered those two school comings. I wasn't sent home. I went to my classes as usual. No one complained or even mentioned anything objectionable. Such rustic odors were probably considered just ordinary, healthful aromas of nature. Or, perhaps, our olfactory nerves in those unsophisticated times weren't as sensitive as they

are today.

For a number of years in my boyhood we raised skunks. Every summer some old mammy skunk would pull together some bedding into the center of the twelve-inch drainage tile that ran under the lane, and there she would raise her litter using the culvert for her den.

We would fill a burlap sack with straw, and with a long pole force it through the culvert. At the opening at the other end we fitted another burlap sack, and mother and young were painlessly forced by one sack into the other.

In the packinghouse we had a big pen, and here the skunks, fed on great quantities of milk and kitchen scraps, grew and played very much like kittens. To be sure they didn't seem to be as alert as our other wild pets, their sight and hearing seemed second rate, but we always became very fond of them . . . so fond, indeed, that it was with difficulty we took their pelts just before trapping



season closed each spring.

I remember vividly our last skunk-raising year. The old skunk we pushed from the culvert had eleven young ones, with almost no white stripes.

Now, our beloved, maiden aunt, Anna, raised and mothered chicks by the hundreds. After her numerous nieces and nephews, she loved her birds best. She was especially fond of one coopful, a fine flock in pinfeathers . . . sixty-five plump, buff Orpingtons.

One morning Aunty went to feed her prizes and found the coop empty. At first she thought a thief had taken them. It had been a warm night in late winter; snow had fallen earlier in the evening but by morning everything was slush. There was no sign of man tracks, but what a thoroughfare from the coop to the packinghouse! The scoundrels had loosened a board in the floor. Now they had all returned



and were sleeping the slumber of the just and the innocent in their straw-filled barrel. The rascals, now practically full grown, had killed every chick, and those they hadn't eaten were wedged tightly under the floor of the pen for future banquets.

### . . . porcupines . . .

I was brought up on the belief that one should never kill a porcupine unless he was lost in the woods and starving to death. A porcupine was the only animal that a lost angler or a gunless hunter could kill with a stick. Therefore, don't wantonly kill a porcupine . . . any porcupine killing was wanton unless the killer was starving. All porcupines, ran the belief, had to be carefully preserved to sustain life in lost, starved, and gunless humans. You were lower than dirt if you disposed of a porcupine just because he made ribbons of your dungarces—the rodent!

Somehow this human benefactor has never rated my appreciation. During my days as a ranger he was constantly mutilating my shoes, uniforms, socks, and gloves. He reduced to something like sawdust anything I handled that wasn't made of iron. Once one brought about a blowout simply by gnawing away at a tire on my old car. I've always hoped that the howl of escaping air scared that particular porky to death, but I know it didn't. Those creatures are so dim-witted that a blowout of a tire just wouldn't faze them.



Scientists declare that porcupines can't help being the way they are. The spiny ones are so everlastingly salt hungry that the varmints are interested only in the vague varnish of salt left behind when a human handles anything. I'll never believe it. They're just naturally ornery bundles of the first water!

Once in California two of us rented, site unseen, a hunting lodge. One night, dark, cold, and late when we stumbled into it, we discovered all the porcupines of the region had been using it for a rendezvous. They had chewed a hole under the door, and then had gone on chewing the fat and everything else. What had once been mattresses was unlike anything else I had ever slept on. They had really ransacked the place.

Once I was driving along the Richardson Highway in Alaska. I was collecting insects and had taken a side "road" that was hardly wider than the car. Dwarf willow and aspen crowded in.

I had gone about half a mile when suddenly on rounding a bend, three of these pine pigs sauntered ahead of me in single file. Naturally it was necessary for the car to slow down to a saunter, too. Hornblowing did no good; they pretended not to hear. I stopped the car and threw gravel at them, got a stick and tried to push them out of the way. But while I was struggling with one, the others would gather goofily around and peer dimly up at me.

The temptation to drive over them was strong . . . but what might those spines do to the tires? Besides that would kill the beasts, and one doesn't kill porcupines! I'd have to reverse all the way back to the highway. Fortunately, when I backed to the curve, the porkies suddenly decided to disappear into the aspens and, glory be, they did!

Once three of us roughed our way across the U.S.A. and were enjoying that most unspoiled of our national parks, Glacier. We had spent the last night of our stay at the campground, and not knowing when there would be a chance for another bath, I arose in the dawn's early light and went for a shower. The bath house was a tiny cubicle, just big enough for the heater and the bather.

Someone, the night before, had neglected to close the door, and a porcupine wandered in. The prospect pleased him. Porky settled down with his anterior under the warm heater in the corner and his shiny posterior out where the showerer would normally stand. The a.m.'s of Montana are cold, and I was inadequately clad—just a medium-sized towel—for I had expected to be the first and only occupant.

Through the door I leaped . . . and hastily leaped out again. Porky's tail swung with pendulum regularity back and forth across the floor, just missing my feet. I argued, but no argument appealed to him. He was warm and comfortable under the heater, and he meant to stay. He was there first.

I found a fire hoe and rake, finally got him loose and got him out. Try that sometime and keep your towel in place, too!

During the scrimmage he had succeeded in littering the floor with dozens of quills of varying lengths, each armed with a sharp hook. I had to find a broom and clean out the barbed lances before I could enjoy the solitude of the shower.

But Porky's days of immunity seem to be over. On recent trips west, in forests especially given over to the growing of ponderosa pine, I saw signs urging everybody to kill the porcupine! It seems that porky is fond of tender buds, twigs, and bark at the very tops of young ponderosas. The Superintendent of the Deschutes National Forest was quoted as saying that a single porcupine will damage or liquidate 20 pines in a year. Kill him! But now that everyone is turning against him, I'm moving toward his cheering section. In spite of his mischief-making, I love him . . . the scoundrel!

The weapons of both skunk and porcupine, their p's and q's—perfume and quills . . . have made a great impression on many species of their contemporaries. Should either be coming up one of our ranger-made trails in one of our natural parks (and wild animals highly approve of man-made paths), and should a larger and stronger animal, a bear, maybe, come down . . . which will surrender the right of way? The bear! He will get to one side and let the plume-waver or the spine-bearer utilize the trail.

We used to feed the bears nightly in Yosemite, and the big, cantankerous bruins, often forty or more, would quarrel and dispute the presence of each other at the troughs. But let a skunk or porcupine waddle in, and avenues through the bears would open as either animal would proceed to the "salad bowl" for anything it thought fit to eat. Though their senses of sight and hearing seem most inadequate, Nature didn't forget them.

Some day, I hope to witness the meeting of a skunk and porcupine, snout to snout, on a very narrow trail.





## FLICKER AND GADFLY

By VIRGINIA PALMATARY MOSELEY  
*Norfolk*

**I** FLUSHED quail in Times Square. You don't believe it! Very well; but it IS called the "Times Square of the South," having gained that title some years ago when a brace of stores was run up at a country crossroads and the glow of neon bombarded the sky and the shopping center syndrome was here.

A person who has spent most of life in the same area has a tendency to view change defensively. First, the military housing needs of World War II flattened a "forest primeval." But, even after that, we were still pretty much "out in the country." Emergency housing created our first dust bowl. Then the octopus of annexation began to uncoil, and we became citified; sheared, suffocated and minced by sewer digging and sidewalk laying. Surely, now, we had attained the Great American Face. But these were only scratches. Now the pulverizer has moved in: the Interstate Highway.

Quail are skittish. They prefer solitary places. The first thing the Highway did was shoo the people out and leave a ghost town. Some of the houses were driven away on flats, creating a new industry and a new traffic jam. But in their places the trees, long restrained, joined hands over the vacant yards and the woods came back. An ironic sign on one woodsy corner says "Watch For Children Playing." It was here, as I walked, that the quail timed their lift off. It was scary and memory-evoking. It awoke in me realization of how desolate our neighborhood has become, how expendable.

Nature lovers can be a misance sometimes, if they are not sure about their aims. But they are not just a minority group. Sometimes they can snafu progress, if necessary. It's the balance of human nature, perhaps. Ever since the colonists, someone has raised a voice to try to keep ambition from becoming too greedy. Today, everybody knows that the indispensableness of the automobile has boomeranged until we are about to become mummified in cement. The former chairman of the Joint Chiefs of Staff said, "We are building ourselves an asphalt treadmill."

So much for hair-tearing. What is being done? A great deal is being done, and written, and said. There is much opposition, all the way from the National Wildlife Federation down to the local fishermen. But the opposition is sometimes not as strong as the bulldozer and is inclined to rally too late. The wheels-roads combo plays to the tune of almost one hundred billion dollars a year. What is the matter with a highway, anyway? Nothing, it's just where it goes, and when. It improves an area doesn't it? Well, the word is "removes." Why get excited about it? As people increase, space must decrease. Where have we heard all this? The important question is, **HOW** does it decrease? What must be sacrificed and what saved back?

Stewart L. Udall, Secretary of the Interior, has written an exciting history of conservation in "The Quiet Crisis." From Thoreau to Franklin Roosevelt he relates the ideals of men who tried to get other men to bind up the wounds left on the earth in the scuffle for its riches.

The Department of the Interior includes the National Park Service. There are twenty-six million acres of this supposedly "open" space. But road builders are notoriously hungry for open space. It has been estimated that there are sixteen million acres of roads; but it has proved difficult to obtain acreage figures from the Bureau of Public Roads.

The road builders do all their budgets will allow to "rebeautify" their mutilations; however, they are under orders to do a job just as a general is under orders to win a battle. Rex M. Whitton, Federal Highway Administrator, says that what is most needed in the constant battle of road vs land is "before and after facts," and sound reasons. Much good has been done by aroused individuals and organizations; in fact, so often they form the *only* opposition. But this opposition is so apt to be panicky, without any solid back-up alternatives. Too often, the final results of a project are not clear to the local residents until the work has advanced too far to make changes feasible. Thomas McGary, Assistant Administrator of Public Roads says, "... the nature people must be prepared with realistic demands." Some have managed this: the Sierra Club's booklet of engineering specifications for roads in park areas; and the bulletin on roads and resources prepared by Utah State University's College of Forest, Range and Wildlife Management are examples. Dr. Ian McHarg, Philadelphia landscape architect, was retained by a New Jersey citizens' group to guide laying of Interstate 95. Dr. McHarg offered a plan for routes having the least social cost. He said his plan was prepared in little time, at low expense, and with information available to the public in any state. Mr. Robert Paul Jordan, in *National Geographic* magazine for February, 1968, presents a splendid, illustrated account of the Interstate System (which is already 65% completed, incidentally). He says, "Critics charge that urban freeways displace people and disfigure neighborhoods." But "... in Baltimore ... a team of highway engineers, city planners, economists and other experts today chart the Interstate's course."

The Bureau of Public Roads has its own facts and figures, of course. The roads go on a cost-benefit ratio: the cost means money for building and maintaining the road; the benefit means how much "motorists" derive from the road. Money comes from the Federal government, the State chooses the course of the road and some subordinate in the system selects the route and it stays that way. Here it is clear that if local feeling is to play a part the effort must be put forth as soon as news of a planned highway can be gained. In 1961 the Bureau of Public Roads sent all State



Highway Departments a memorandum requiring consultation with their state fish and game departments to clear any highway plans. However, someone must stay constantly awake to keep impulse from just plain getting lost in paper work and waiting.

Highway officials may quite understandably groan at handwringing and poetry-quoting at public hearings. But poets and artists have left their footprints on the history of conservation. The poet William Cullen Bryant, while editor of the *New York Evening Post*, wrote the editorial that struck the note that resulted in New York's Central Park. Frederick Law Olmstead, who designed Central Park, was one of a group who persuaded Congress to pass a bill which was signed by President Lincoln in 1864, ceding Yosemite Valley to the State of California for scenic use. The Yellowstone Park bill was signed by President Grant in 1872, culminating an idea conceived by a group of men who considered scenery something of value. Yellowstone was our first national park. The concern of a few people for the rights of future generations made the difference.

Morristown is a small New Jersey locality in the path of the road system that is about to swallow the state of New Jersey, which, by geographical accident, is a natural thoroughfare. In Morristown, four genteel, personable ladies sat for an hour and a half in the scoop of a bulldozer. They did not change the highway, but they created a delaying flurry.

At what point do we return to the quail? What has happened in our own back yard? The threat of impending highway has hung over our property and our lives for a good ten years. The final exodus was swift. We could almost see the people stream away. Swings were left swaying, but in the wind. Birdhouses and gardens were left as uninhabited as the dwellings. As I have said, the abandoned homes reverted swiftly back to woods. Here, strolling on a crystalline October morning, we might discover eight or more flickers absorbing ants at the base of a beautiful, paisley sycamore tree. The flicker wears a red beany, black cravat; speckled waistcoat, yellow lined cape, and, disappearing in flight he looks like a cottontail rabbit. And if you come too near he is sure to disappear in flight. The flicker is an occasion. However, he is not so exclusive as the quail. He will turn up, some day, so long as there is tree bark. The same is true of the sycamore. There will be fewer of them, but they will be around for some time. They are hardy, useful and not too slow-growing. To me, that splotched trunk, puckish on a grey day and like moving water in the sunlight, is a positive tranquilizer.

Undoubtedly I have meandered from the central theme. Meander is what mountain streams do. It is a nice delaying action, like asking a bulldozer operator in for tea. Spill tea down the front of your shirt and where does it go? Straight down? It is more apt to make little zigzags across your middle. So a little stream goes cackling down a mountain: whistling, roaring, clapping, in and out of a million serpentine humps and tracks in the squashy river bed. Have you ever stretched yourself across a rock and put your eyes out trying to spot something moving in one of those puddles? Here is where living things like to blap and dawdle. So, to the nice soft stream bed comes the road dragon to wallow. So much easier to dump a road where much of the cutting has already been done. What about the stream? Well, just one more pretty little band of water is just plain gone, or, a really lucrative (at least in pleasure) trout stream is so crammed with silt and debris that it becomes uninhabitable

by trout. There are happier examples, such as the beautiful lakes described by Mr. Jordan in *National Geographic*, which came about as a result of laying a road in the Platte River Valley. However, one dramatic exception does not compensate for numberless little irreplaceable treasures, destroyed because of the lack of early planning.

If the dragon isn't gobbling up the river beds, he is gnawing and slicing at the crowns of our mountains until our rocks and rills are pocks and fills. Nothing is so disheartening as the sight of a once rugged and noble mountain slope wearing the terrible scars and disfigurements of a raw road. Replanting may provide plastic surgery, but so much is irrevocably lost. Was the loss necessary? Was there another possible route?

Perhaps the greatest and most inexhaustible natural resource is the human spirit—hope, in other words. Today, anyone able to bird walk, ought to write to their editor, their congressman, Aunt Hilda or anybody lungy enough to spread the word. It might throw a temporary wrench in the public works and give somebody time to think. The minds behind all great building projects, highways and otherwise, should be conservationist minds. Local groups who seek to make a worthwhile protest should track down the records of the winning cases and find out what arguments were used and then use them again. Above all, protest should be undertaken early. The Big Sur Highway on California's coast was saved by the efforts of a comparative few. "This is the first time that a community opposed to a freeway has come up with a practical solution," wrote Frank J. Taylor in "They Saved The Big Sur," *Readers Digest*, November, 1967.

Must that pretty falling stream near your home be silenced in order to simplify some remote traffic problem?



Commission photo by Kesteloo

And what about the little stream?

Or might a good public gadfly, or better, a swarm of them, keep it chuckling on?

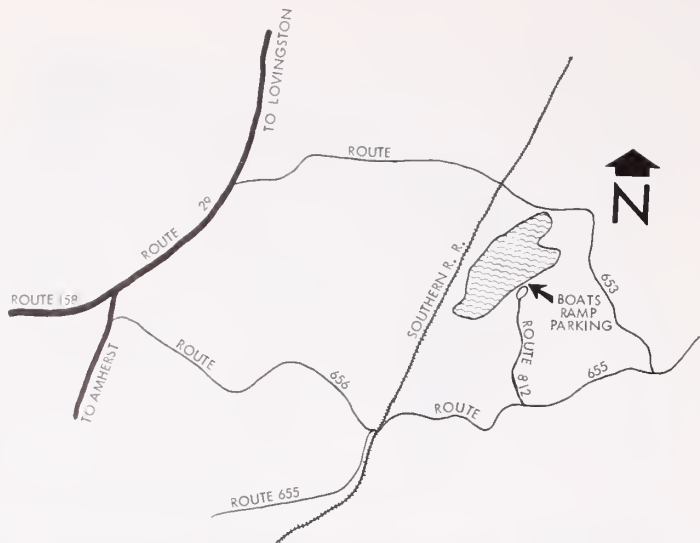
Tomorrow, would you prefer to draw your drapes, or build your walls against a world unbearably ugly? Or would you rather fight today for a planned distribution of what natural beauty is left for us? Far-sighted men, fighting an always stronger opponent, have endowed us with many miracles. It is our moral debt to be just as far-sighted. We can do no less for those who are to come after us.



## COMMISSION-OWNED LAKES:

# Lake Nelson

By H. L. GILLAM, *Information Officer*



Commission photo by Harrison

Lake Nelson lies in a wooded section in the Blue Ridge foothills off of Route 29. Fishing is expected to improve markedly following the recent renovation and restocking with adult fish.

The lake has a large parking area, limited picnic facilities and a ramp for launching private boats. A concessionaire has boats, bait, drinks, snacks and tackle.

Commission photo by Kesteloo



**T**HE Game Commission anticipates reopening Lake Nelson to public angling in late 1968 or early 1969, following a two-year closure for renovation and restocking. The renovation process was speeded up a little by the addition of adult fish from experimental ponds no longer needed at the Commission's Front Royal hatchery. These fish are expected to provide better angling than is usually found in lakes restocked with fry. The lake is located in Nelson County, just east of the Route 29-158 Junction near the community of Arrington. It is 45 acres in size and lies in a mixed hardwood-pine forest in the foothills of the Blue Ridge.

The lake is one of the Commission's more manageable, but in spite of the imposition of a 12-inch minimum bass size limit in 1961 the bluegills remained overpopulated. When the lake was drained, a number of muskellunge stocked experimentally in 1964 were recovered in good condition. Muskies will be reintroduced again since these appeared to have done so well.

Before renovation, bluegills provided the bulk of the fishing with catfish also showing up in the creel in significant numbers. The lake also contained crappies. There are problems in getting proper bass reproduction, and it is hoped that the restocking following renovation will also solve this problem.

Bass fishing was rated best in April, May and June. Bluegill were most easily caught during the summer months. Channel catfish action began early in spring and continued well into mid-summer. Around 10 to 15 fishermen could be found on the lake on weekends during spring and summer months. Concession facilities include boats, bait, drinks, snacks and some tackle.



# CONSERVATIONGRAM

Commission Activities and Late Wildlife News . . . At A Glance

**ALEWIVES RELEASED IN SMITH MOUNTAIN.** Approximately 13,500 landlocked alewives from New Jersey were released into Smith Mountain Lake to bolster stocks of forage fishes in the reservoir. This is the second introduction of these desirable forage fishes and recent investigations by V. P. I. fishery workers indicate that a high percentage of the original stocking in 1965 have survived and reproduced. The second introduction was largely an insurance move.

These landlocked members of the saltwater herring family never grow more than about 6 inches long, thus they never get too large for bass and other predators to eat. Threadfin shad from the Tennessee River System have most of these same attributes but are unable to consistently come through our colder winters without big die-offs.

**LAW CHANGES AFFECT ANGLERS.** Several law changes made by the Virginia General Assembly and others made by the Commission of Game and Inland Fisheries went into effect on or before July 1. The daily trout creel limit went to eight on all impoundments except South Holston, Smith Mountain, Carvins Cove, Philpott and John W. Flannagan Reservoirs and on Douthat Lake, where it will remain five. Fishermen on South Holston Reservoir need a trout license (not required on other reservoirs) to creel a trout. A closed season on trout from November 15 through January 31 will go into effect on South Holston this fall.

Minor grandchildren are allowed to fish, hunt and trap on their grandparents' property without a license. A new provision allows non-resident children under 12 to fish (except in designated trout streams) in Virginia without a license if accompanied by a person with a valid Virginia license.

Anglers fishing in the New River from Claytor Dam to the West Virginia line must return all bass under 12 inches in length. Anglers fishing in the Shenandoah River from Forest Service lands are not required to have a National Forest Stamp.

**1335 GOBBLERS BAGGED IN SPRING SEASON.** Hunters bagged a record total of 1335 turkey gobblers during the three-week spring season. This surpasses the 1967 total of 810 by over 500 birds. Amelia, Dinwiddie and Fauquier Counties shared top honors in producing the most birds with 49 each, followed closely by Rockbridge and Prince William with 48 apiece. The kill was generally high in the central piedmont and northern Virginia, and in the mountain counties about 75 miles north and south of Roanoke.

A number of factors are thought to have played a part in the unusually high harvest including the extra week of hunting, generally warmer weather, a more experienced army of hunters, and a greater abundance of birds than was first estimated following last fall's low turkey kill. Abundant mast apparently kept more turkeys out of sight of autumn hunters than was previously suspected. Hunting in eight counties was restricted to public lands and military areas only, shrinking the area from that open in 1967. The heaviest birds bagged were two 25-1/2 pounders, one from York County and the other from Bath County.

**Do you have your new fishing license?**  
**You need it now!**

# Lake

By H. L. GILLAM  
Information Officer



Approximately 95,000 anglers, both young and old, try their luck in the 218-acre lake each year.

**L**AKE Burke is the best of the Game Commission's lakes constructed to date. The 218 acres make it the largest, and the adjacent facilities developed by the Fairfax County Park Authority are by far the most sophisticated on any Commission lake. It has the best watershed ratio of any Commission lake allowing intensive fertilization and resulting high fish production. It is situated near large urban populations and consequently is heavily used. An estimated 95,000 fishermen cast their lines into its waters annually and many thousands more come to enjoy the tranquil setting and to take advantage of the adjacent recreation facilities.

The lake is located in a mixed pine and hardwood forest, and the 532 acres of surrounding park land give an isolated atmosphere in the highly urbanized section. The lake was engineered and developed with only the fishermen in mind. Fourteen man-made brush shelters serve to concentrate the fish for the angler. Bulldozed spawning areas, dropoffs and submerged ridges help fill the fishes' habitat needs. A beautiful modern brick marina features snacks, bait, tackle and 200 boats to serve visiting anglers. There are two launching ramps on the lake and spacious parking facilities.



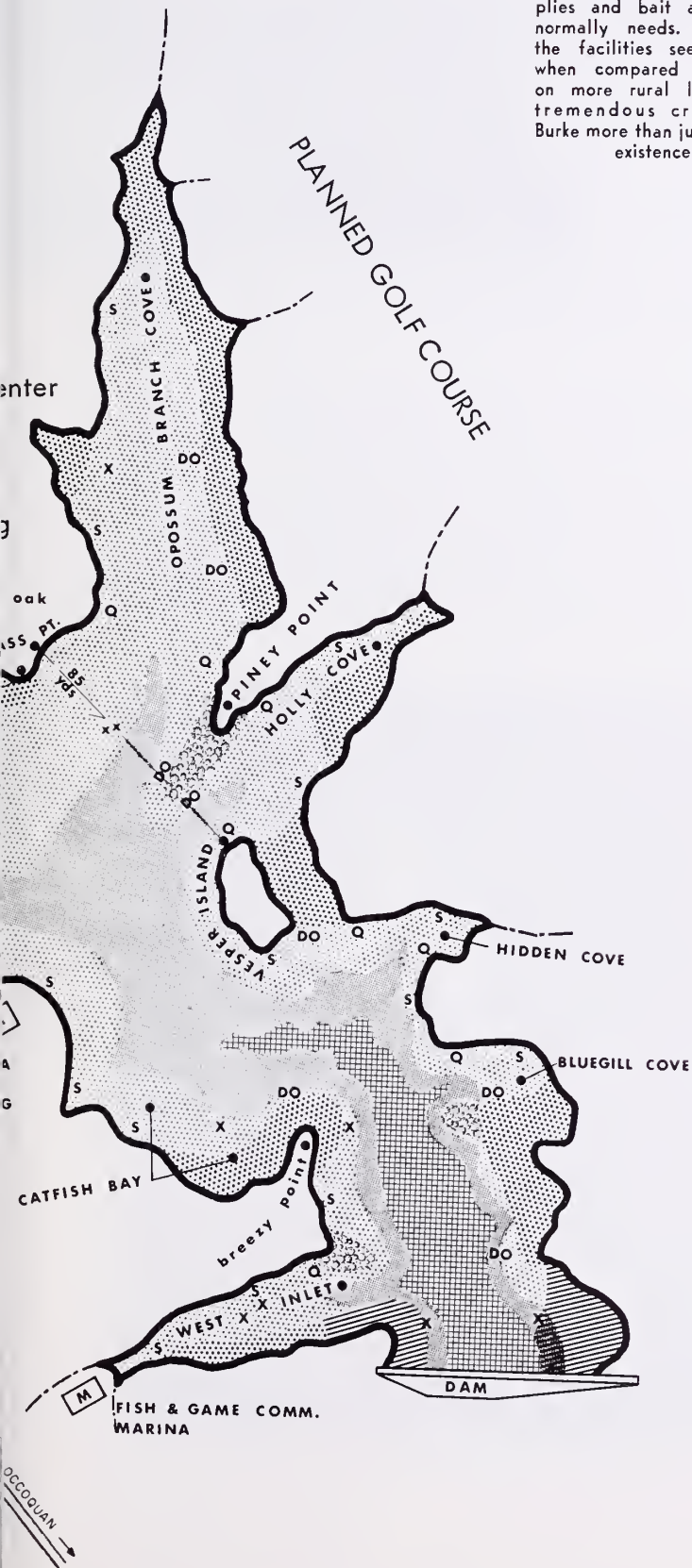
The lake's forested shore bordered by a large acreage of park gives it a peaceful atmosphere that belies its location in the fastest-growing urban area in the state.





# Burke

An attractive brick marina furnishes all the supplies and bait an angler normally needs. Although the facilities seem lavish when compared to those on more rural lakes, the tremendous crowds at Burke more than justify their existence.



The lake is a good fish producer, but the bass population is heavily cropped by the great number of fishermen. A 12-inch bass size limit protects them until they reach a size where they can effectively control sunfish numbers, but they are harvested almost as soon as they become legal. Larger bass are caught from time to time. However, the lake has probably produced more citation-sized (1 pound and over) bluegills and shellerackers (redeer) than any comparable body of water in the state. Channel catfish thrive here, too, with a number over the 10-pound mark taken in recent years.

Bass fishing is best in May and June and again in early fall. The flyrod enthusiast can catch and release just about all the bass less than 12 inches that his arm will stand in a day's fishing. The bluegills also respond to bugs during the spawning season, but most of the really big ones are taken on bait fished deep around the brush shelters. The summer months are best for both bluegills and catfish.

Spacious camping facilities are provided for both vehicle and tent campers at a cost of \$1 per day. Attractive picnic grounds line the lake shore and features for the children including a train ride, children's farm and nature center are in the planning or early development stages. The area abounds in hiking and bicycle trails.



The marina has 200 aluminum boats for rent along with the required life preservers. Gasoline motors are not permitted.

# STREAMS

## WERE HERE FIRST

**W**HEN God fashioned the Virginia portion of this earth, He blessed her anglers with an abundance of streams. Most were beautiful ribbons of clean, wild water that drained her mountains and foothills, and poured untainted water into the Atlantic Ocean to the east and the Mississippi River drainage system to the west.

Today, the beautiful Shenandoah flows north to the Potomac, and the winding Roanoke, south through several reservoirs to North Carolina and Albemarle Sound. The historic James, forming near the West Virginia line, divides the state north and south in its dash to the Chesapeake Bay, and the sparkling New River wanders through much of southwest Virginia before pitching into the West Virginia mountains on its course to join the Ohio.

Progress has taken its toll of these and other fine rivers, but most of them are still capable of supporting a top-drawer fishing jaunt. And heartening noises in pollution abatement circles raise glimmers of hope that some may eventually be restored to a semblance of their original purity.

With Lake Drummond in the Great Dismal Swamp the only sizable natural lake in the state, Old Dominion anglers for years had to rely heavily on their streams for their freshwater fishing. And while reservoir construction is slowly altering this scheme of things, changing free flowing waters to impounded ones, we still look to our rivers for some of the best fishing in Virginia. The excellent access development program of the Commission of Game and Inland Fisheries is opening most of them to the angling public.

Smallmouth bass, king of many Old Dominion rivers.



By BOB GOOCH  
*Troy*

While reservoir construction is slowly altering the scheme of things, we still look to our rivers for some of the best fishing in Virginia. Above, early morning mist greets a canoeing angler on the James.

Collectively, our streams include tidal estuaries and mountain trout brooks, but this discussion will be limited to the fast flowing rivers, such as the Upper James, Shenandoah, New and Roanoke. Other good examples are the Rapidan and Rappahannock, the lower Jackson, and both forks of the Holston. Canoes and johnboats, chest waders, white water and placid pools, smallmouth bass, scrappy sunfish and rock bass—these are the marks of the waters I have in mind. Except for the Coastal Plains, they can be found all over the Old Dominion.

While there are inherent risks in fishing such streams, the recognition of these risks, and a common-sense approach to obvious dangers make such fishing jaunts as safe as an afternoon on a mill pond. White water, particularly, should be studied carefully before heading pell-mell into it. Employment of the old "buddy system" of boyhood swimming days is a good idea, for a small problem can become a major one if help isn't close by.

The float trip is the most popular method of stream fishing. Besides fishing tackle, a pair of anglers need two automobiles and a canoe or light ear-top boat. Both drive to a downstream egress point, leave one car, and then load into the other for the trip to an upstream access point where they launch their boat and fish back to the first car. Both automobiles should be equipped with carrying racks, so the boat can be loaded downstream without first having to drive back upstream for the car with the carrier.

It's a good idea to study a stream map, and attempt to determine the distance between the two points, giving consideration to the meandering course of most streams. Where possible the access points of the Commission of Game and Inland Fisheries have been conveniently spaced, but bridges, ferry slips, private roads, logging roads—all provide access to good fishing waters. It's a mistake to bite off too much stream. The urge to move rapidly along toward a distant destination is not conducive to thorough fishing. Even the normal flow is sometimes too rapid, calling for a light anchor to serve as a drag.

River fishermen seem to be about evenly divided between



canoes and johnboats. Both have their advantages, and it's mostly a matter of personal choice. The stability of the flat bottom johnboat is offset by the greater maneuverability of a canoe in dodging boulders and navigating fast water. However, the inexperienced boat handler is probably better off in a johnboat.

Many anglers prefer wading over the use of a boat. Of necessity they move slowly and undoubtedly cover the water more thoroughly. And being closer to the surface of the water, they are in a better position to study it.

Most access points are too far apart for the wading angler to work from one to another. Instead, he picks out a section of stream and works up or down from the point of access, eventually moving on to another if time permits. There is no need for a two-car arrangement here.

The angler needs chest-length waders for this kind of fishing. Regular hip boots, so popular on Virginia trout streams, limit the angler's movement as much of the water is too deep for them. A belt worn over the waders and around the midriff will prevent the waders filling with water should the fisherman fall or slip.

The belt is also handy for carrying a landing net, fish stringer, or lure box.

A stream is every angler's water. Most probably use light spinning tackle and 4 to 6 pound monofilament, but there's plenty of room for the fly fisherman's back cast, and he finds prime water on which to work with a long line. Even the bait caster finds the smallmouth bass receptive to his lures. Most fly fishermen seem to prefer wading, feeling it is conducive to better casting, but there is no hard and fast rule here. Many spinning anglers like to wade.

The smallmouth is king of most streams in Virginia with the colorful little sunfish his usual stream mate. Pickerel join this pair in many eastern streams, and walleyes and rock bass share our western waters with them. Size-wise

Chain pickerel are common in many eastern streams.



The access program of the Commission of Game and Inland Fisheries is opening up many fine Virginia rivers.

the bronze stream bass seem to level off at about 5 pounds, though larger ones are reported every season. But the strong river currents keep them trim and ready for battle. They have an edge on the stubby fish with the big girths more common to our reservoirs.

Ask the average smallmouth angler what his favorite lure is and he'll probably vote for a surface lure. They are real producers on these often shallow waters. A favorite is a crippled minnow type with tiny propellers on each end. The better ones kick up a fine spray. A surface lure offers many advantages, as its action is easy to follow with the naked eye. And riding high in the water, it seldom snags, a problem that plagues river fishermen. But the greatest angling advantage the surface lure offers is the joy of the surface strike. There is no other angling thrill quite like it, and fish caught on surface lures seem to outjump those hooked in the depths.

The number two spot would likely go to the popular spinner-fly combinations, several of which are on the market. These lures cast well and have good action. They also get more attention from sunfish and rock bass than do the surface lures, adding an element of uncertainty that is not present with topwater baits. Both sunfish and rock bass hit surprisingly hard, their strikes often misrepresenting their true size. Of course these deep-running lures hang on rocks, logs and other obstacles, and the angler should plan on losing a few though he soon learns some of the tricks of freeing his lure. One of the best is to paddle or drift beyond the snagged lure, and usually it will come free.

Feather and bucktail jigs are also good, and bass, pickerel, sunfish—all like them. Most are built on single hooks that ride upright when retrieved. Consequently they are not as susceptible to snagging as the treble hook spinner-fly lures.

Fly fishermen use streamers effectively, as they resemble small fish which comprise a major portion of the diet of so many river gamesters. Popping bugs are good in quiet stretches, and small spinners and wet flies will take sunfish as well as bass. Tiny rubber bugs behind spinners sometimes work wonders.

(Continued on page 22)



# Let's Cook Frog Legs

By MARJORIE LATHAM MASSELIN  
Richmond

NO boy should be allowed to grow up without having a frog pond handy. A boy, a frog pond and a summer day just seem to go together. I suppose if I had had the brother I always wanted instead of being an only child I would have missed the whole thing, but as it was my grandfather had to make do with me.

Grandfather and I had discussed the merits of fried frog legs on several occasions but we had never gone frogging together, because as he put it, "You have to wait for the right kind of day." What he meant, of course, was that we had to wait for a day when both Mother and Grandmother would be absent for a reliably long length of time. Fortunately, they were both "joiners," and such days occurred with fair frequency and at regular intervals. The best meeting day of all was "Ladies Guild." That often involved a covered-dish luncheon, which meant that Grandfather and I would have practically the whole day. Still, there was no sense in wasting any of it, so the minute Grandfather left to drive them down to the parish house I skinned out of my dress and into more respectable attire.

Our Harry was never so fond of work that he minded having me interrupt it, so he and I were sitting on the kitchen steps getting the "bait" fixed when Grandfather got back. Harry must have had some pretty wild ideas about catching frogs because he was diddling around with fish hooks and red flannel, and I could tell the minute Grandfather saw it that he did not think much of it. What he said was, "If you expect to eat frog legs you're going to have to get your feet wet."

That was fine with me. I rolled up the legs of my overalls (jeans had not been invented then) and discarded my shoes. I could never really blame Harry for making mistakes like this. After all the years he had worked for my grandmother he was pretty well brain-washed on the subject of what little girls might properly do and not do. Besides, it would never have done to have words with him even if I had felt like it; I had to depend on him to keep the overalls washed and out of sight.

On the way down to the shed to get the gig, Grandfather gave me a general run-down on the principles of this new skill I was about to be taught. It sounded like a pretty desperate business, and I understood why it had been necessary to wait for a "Guild Day."

The pond was at the foot of the terraced gardens that sloped away from the west lawn. It was not a true pond at all—just an extra-wide place that had been made in the Brook. The Brook ran all the way through our prop-

erty from somewhere in the swamp or beyond it, past the gardens, under the road and through the pasture; then down beyond the first meadow it lost itself again in the woods.

There were willow trees that dipped their slender leaves in the water and one very old apricot tree—so old that it no longer bore much fruit. It was the best tree down there for shade because the branches never got in your way. Directly under it there was a great flat rock that jutting into the water. Grandfather thought that rock must have been left by the Ice Age and spent a whole afternoon once telling me what *that* must have been like. Grandmother did not think so; she seemed to think Grandfather had put the rock there and reminded him how the horses had torn up the garden to get it in. Grandfather could never recall the incident she described, and so I never did find out for sure.

The rock was a wonderful observation post if you wanted to enjoy the pond without getting wet. You could lie there on your belly for hours and watch all kinds of life in the water. One time I watched a pond lily open. Imagine that.

Grandfather believed that demonstration was the best way to teach. In support of his theory he often pointed out that if you were unable to do a thing yourself, how in tarnation did you expect to teach anybody else to do it, eh? Well, Grandfather demonstrated the procedure for gigging frogs and I must admit that he was pretty good at it. He did not exactly make it look like rolling-off-a-log, but he did end up *with* three frogs and *without* losing his balance. He forgot to mention balance. I was a bit surprised and more than a bit wet when I came up for air and discovered I had nothing on the gig other than an assortment of last year's leaves and the root of a pond lily. It took a few tries, quite a few as a matter of fact—some on dry land and some at the water's edge—before I finally got the hang of it.

I had done far too much splashing around on my initial effort, but the water had cleared pretty well by the time Grandfather declared me ready to try again. That there were any frogs left in view, I can explain only by saying that these were very friendly frogs and that they had not at that time come to accept my behavior as the bona fide betrayal it was. I was not thinking of it in those terms either; I was thinking of it as lunch, and Grandfather said if I didn't gig one pretty soon they would all die of fright and we would have to eat beans. I never have cared much for beans so I concentrated my efforts on an old bull frog that had caught my attention by his demanding call for a "jug-o'-rum." He obviously thought I had given up the whole idea and was off his guard . . . and I got him! Needless to say, I did not manage to gig him at the base of the brain where you are supposed to in order to assure instant death, but so far as I was concerned at the time the great thing was that I had gigged him at all! And Grandfather dispatched him in nothing flat with the sharp point of the penknife he always carried. We gathered ourselves, the gig and the catch together and raced each other back to the house.

As soon as she saw me Molly threw up her hands and let out a very high-pitched "Laaaawwwwww ME!!!" so I knew I would have to get cleaned up before I could expect anything to eat. Grandfather favored the garden hose, but I thought that would be too cold. What I finally did was to take off all my clothes in the woodshed and

Commission photo by Kesteloo





Molly wrapped a towel around me and we went up the back stairs and I got in the tub. It took some little time to get my hair washed and comb all the tangles out because it was very long. *Finally*, we were ready to cook those frog legs!

Grandfather had skinned them and they were all ready to be fried. Molly rolled them in a mixture of flour, salt, pepper and paprika and set them on a plate. Then she put a great dollop of fresh butter in a heavy copper frying pan that I wish I had now and waited for it to start bubbling and turn a little bit brown. Just pale golden brown. You must never let it get past pale gold or it will burn very quickly and spoil the taste of what you are cooking. When it was just right, she put the frog legs in carefully and let them sizzle awhile before turning them. She seemed to know just when they were ready without using a clock. Actually it takes about three minutes if the pan is right. They need to be cooked through, but like most other flesh, if they are overcooked they get "chewy." Tongs are best for turning.

We ate them with a salad of fresh watercress that grew of its own accord in our spring, and we put olive oil and vinegar on it. We had some pan fried potatoes, too because Grandfather said he was extra hungry after watching all the exercise I had had. I have always remembered it as one of the best meals I ever ate anywhere.



Commission photo by Kesteloo

Of course eventually I grew up and married and had the son my grandfather would so much have enjoyed. The frog pond was filled in years ago by Progress, and there is a housing development there now. But our son found his own frog pond on a camping trip and when he came home sunburned, starry-eyed and totally exhausted you would have thought he was the first ten year old in all recorded time to have discovered that frog legs were mighty good campfire fare. That was years ago and he is at school in Europe now, but when both he and a supply of frog legs are available he seems to enjoy being chef for the time it takes to prepare a Frog Legs Omelet. To make one you need at least two pair of frog legs per person. Skin and bone them and cut them in small pieces. Beat up one egg for each pair with a not-too-full teaspoon of water for each egg. For every four legs (two pair) mince the white part of a spring onion. Heat plenty of butter in a heavy frying pan and saute the onion and the cut-up frog legs for five to ten minutes, depending on how tender the frogs were and how full the pan is. Sprinkle on a little salt and pepper and pour on the eggs.

Reduce the heat and let this cook gently, lifting it from time to time with a spatula so that the uncooked part runs underneath and keeps the part that is cooked first from getting overly dry. Turn one half over the other and slip it onto a hot platter.

All you really *need* to go with it is an appetite, but we usually have a salad and some of those fried potatoes.

## Charming Rascal

By LULA P. GIVENS  
Christiansburg



Leonard Lee Rue III photo

**N**EW subdivisions have been opened in our town and a forest of oaks and maples with thick underbrush has been removed for house sites and lawns. Interspersed among the houses and lawns are lots not yet cleared which have become a pleasing habitat for many birds and small animals. One such lot joins my lawn and from it, disregarding boundary lines, the creatures of the wild come to visit my backyard—birds, chipmunks, squirrels, rabbits and an occasional skunk.

A pair of chipmunks has taken possession of the woodpile which I have in reserve for fireplace burning on snowy holidays. Flickers search the top logs for worms and beetles, or feast on ants from the colony by the old stump.

Woodpeckers tap the trunks of the oaks. Once in winter I had the rare good luck to see a pileated woodpecker for the first and only time although my neighbors say a pair is still to be seen in this vicinity. This one was grayish black with red and white markings, and a crimson crest. Its long bill was wedge-shaped. The bird itself must have been 20 inches long.

Friendly to people, the robins and mockingbirds come close. Grackles walk about, their burnished beauty shining in the sun. Rivaling the mockers' song with their own lively, liquid ones are a pair of brown thrashers which I think returned to their nesting site of last year.

However, the most intriguing ones are the blue jays. They swing on utility wires and clothes lines, perch on the railings of the stoops, and peck voraciously in the gutter pipes on the roof, screaming at all and sundry.

Alighting on a window sill, the blue jay will peer in curiously, but he flashes away at the slightest movement. Sometimes he will leap high from the ground as he seeks to catch a flying insect, or the spider parachuting down from a tree. Then in a game of swaggering defiance, he will chase to a stump a squirrel which in turn chases him. There seems no rancor in this but a kind of challenging *do and dare*.

Ornithologists and many bird watchers accuse the blue jay of robbing the nests of other birds and eating their young. This happens when the jay has young of his own. The jay is hardly seen at all at this time, perhaps, because these sly underhanded dealings of his take time and careful

(Continued on page 20)



watching near the nest he is about to pillage.

Being a member of the crow family, the jay is a collector. He has been known to collect and hide beads, colored string, thread, and ribbon, or any small shiny object.

The jays' nest is loosely, carelessly constructed as though it were an object of no importance. Yet they seem to be devoted, courageous parents. Returning from school one spring afternoon, I saw in the thin sunlight under the maple tree, a baby blue jay, squawking and shaking, with only a faint trace of its parents' blueness, and not an iota of their grace and sleek beauty. Thinking to save it from a prowling cat, I picked it up and placed it in a low hanging branch above the driveway. It immediately fell to the ground and, still squawking vociferously, skittered across the road to the neighboring lawn. Above it flew both parents screaming imprecations at me.

The next afternoon I had callers and walked with them to their parked car. From the maple tree the parent blue jays swooped upon me, recognizing me no doubt by the pink dress which I wore and had worn the day before. The young jay had evidently come to harm and they blamed me. Paying no attention to those with me, they circled my head and darted at my face with wings flapping and voices screaming. The jays were driven off by the others but not before I had gotten a taste of fright which the jays' victims must often feel when faced with defending their eggs and young from this predatory bird.

As a child I remember entering a stand of tall pines with my mother and youngest brother. The forest-floor beneath our feet was springy with needles; the wind murmured ever so gently in the pine tops; and our hushed voices were very low. Surely we made little noise, yet a blue jay flying among the uppermost branches screamed a warning. My mother said it was on lookout duty, and that it was informing all other birds and animals of our approach. She translated its call, perhaps for my brother's benefit, "Boy with a gun! Look out everyone!" Whatever the meaning of the call, other blue jays took it up till the forest rang with their noisy cries.

Ornithologists say the jay cries, "Thief, thief!" which is odd, because many of them agree that the jay himself is a thief. Perhaps he may be trying to whiten himself by putting the blame for his crimes on another. Hence, "Thief, thief!" he cries, when caught lurking beside a nest not his own as though he had just discovered the culprit. Another name for the jay is *nest robber*.

Through my kitchen window, I recently saw a blue jay standing over one of the chipmunks in the short grass. The chipmunk was motionless, whether from fear of the jay or because of a feeling that there was no cause for fear, I do not know. I expected the jay to attack the head of the chipmunk as he does that of a young chick, and kill it with his strong beak. But after an instant he moved aside and the chipmunk quickly slipped away to its home in the woodpile.

Busy-body, informer, thief and assassin as the jay is reputed to be, he is still one of the most vigorous and beautiful of the birds. Whether he is eating with arrogance the crumbs scattered in the snow, or making the yard ring with sound in the summer, he brightens the dullest day and lifts the lowest mood.

His whistle to his ladylove is unbelievably sweet, round, and mellow. When we hear it, we are inclined to accept his shortcomings and, as she does, love him for the handsome fellow and charming rascal he really is.

# R A B B I T



Leonard Rue Enterprises photo by Focht

THE early morning spring sunshine was warm and soft. I watched the gray, cottontail rabbit hop through the flower bed close to the back of our house. This was one of her trails, for I often saw her there at this time of day. She wove around the small boxwoods, stopping now and then to investigate the jonquils and young pansy plants. I looked forward to her little jaunt through our yard although I knew she liked the people better who had vegetable gardens. She was soft, gentle and friendly and didn't bother my tender growing things too much.

Suddenly she sat up—alert! A slight movement or sound was always a signal of danger. She was motionless, ears erect, standing on hind legs, almost on tip-toe, nose twitching delicately, front paws dangling down. Because of her magnificent vision she was able to see almost all of the area surrounding her. There was just a small space in back that was not visible. Her dark, protruding, rather moist eyes were large for her head. I had the sensation she was staring straight at me so I sat very still. She made sure there wasn't an enemy in sight then dropped her front paws to the ground, nibbled on a bit of clover and hopped off to the wooded area.

There she found a sunny, dusty spot and proceeded to roll. This was her bath. She groomed herself, scratching and combing her fur using the long claws of her hind



# H A B I T S

By FRANCES REEVES OWEN  
*Bedford*

feet. Next she scrubbed her face with her forepaws. The final bit of her bath was the washing of her paws which she did by extending each one forward and cleaned it thoroughly.

Some weeks back she had mated with a male rabbit. During their courtship they had hopping contests. One would leap straight in the air while the other dashed underneath and vice versa. Sometimes the male rabbit stalked around her on stiffened hind legs. After two or three days of leaping and cavorting the mating took place. Then she took a violent dislike for the male. She chased him away and sometimes bit him if he came too close. He finally took off to more friendly companions. Now she was getting ready for her first litter of the early spring.

She had fixed the nest in a protected area under a bush some days ago. The form or indentation in the ground was about five inches deep and seven inches long. After digging it out very carefully, she padded it with dried leaves and grasses. Then she plucked soft fur from her chest and padded the nest. She covered it with a protective mat of leaves and grass. It was warm, cozy and ready.

The last day she instinctively didn't wander far from the nest. Suddenly, with little warning, she gave birth to six baby rabbits. The nest was not the birthing room, she was a few yards away. She gave each one a very thorough bath and carried them one by one to the nest. They had their first feeding, then she covered them with the matted grass and retired a short distance away to guard them. It would be very difficult for any living thing to spot those tiny, blind and helpless rabbits as they snuggled together in their furry cradle.

The mother left them alone during the daylight hours but crouched close, watching them. She fed them only under the protective cover of darkness. She herself foraged for her food at dusk or the early morning hours. On the fourth day tiny squeaks could be heard from the nest and she immediately became more alert.

Suddenly a black cat came into view! He stalked slowly through the underbrush and sodden mat of leaves. He was hungry and hunting. His pointed ears twitched, green eyes darted here and there for the slightest movement. His tail was straight and tense except for the tip which waved back and forth in a steadied rhythm. Another squeak and the tomcat crouched ready to pounce! The mother rabbit, motionless, ears laid flat against her neck and back, watched the cat. He, eager for the kill, moved silently closer to the nest but didn't know its exact location. In a flash, to defend her babies, she sprang forward to divert the cat's attention. She sped away through the tangled undergrowth and hopped over logs. The tomcat gave up. Later that night the mother rabbit came back. Her babies were all right but hungry. She fed them, then moved them, one by one, to a safer place, a new nest in a denser part of the woods.

Life for the young rabbits was always in jeopardy

because of their many enemies. The mother rabbit, with very little defense, did her best to raise them to the point when they would be on their own. She not only had cats to contend with but dogs, snakes, owls, hawks, even heavy rains which sometimes flooded the nest, drowning the young. She had to depend on her keen vision, swift running and clever twisting, sudden stops and leaping to outwit and confuse the enemy. Sometimes she would go so far as to slam her heavy hind foot in the predator's face if he ventured too close. The mother love of the rabbit is so intense that she will sacrifice her own life for the safety of her babies.

When they were about two weeks old, they were ready to leave the nest permanently. The mother rabbit watched them hop off into the forest. She let them go without giving them another thought.

Throughout the summer she would have many litters, following the same procedure, protecting them until they were ready to fend for themselves. Only a low percentage of her young would live, and she herself would be lucky to survive longer than a couple of years. Probably no wild creature has more enemies and less defense than the rabbit.

Her mating season ends sometime in September when she begins to prepare a winter nest in a hollow log, the spreading roots of an old tree or an abandoned woodchuck's or skunk's home. Her food during these cold months is bark, herbage, berries and buds. She has well established runways or rabbit trails to travel in but won't venture out in the snow too much, for it exhausts her to hop through the drifts. By early spring she is ready for the cycle to begin again.

From the rabbit's point of view life is extremely hard. Just about every living creature is against her and her babies, including automobiles and the elements. Gardeners speak harshly of her and her love of tender growing plants.

But the soft, appealing, little gray, cottontail rabbit is oblivious to all this antagonism. She continues her way of life, fiercely protecting her young and reproducing them as quickly as she can. She has to if her species is to survive.

Barely two weeks old, and on his own.

Leonard Lee Rue III photo



One of the joys of fishing a stream is the ease with which an experienced angler can read her waters, and quickly spot the most likely holes. This is not true of large lakes and reservoirs. A big body of water can baffle an expert—until he has time to learn it. But put an experienced angler in a good stream and he's right at home.

Midstream boulders, pools at the foot of rapids, blue holes beneath the sprawling roots of sycamore trees, the mouths of tributaries, rocky cliffs—all are fish indicators, and they vary little from stream to stream.

The smallmouth angler looks for boulders and rocky cliffs. Fast water is usually good, and a combination of these features almost cries "smallmouth." One of the best stretches of bass water I know of is so identified. Rugged boulders line the western shoreline forming a picturesque 20 foot cliff, and the riverbed at this point is mostly solid rock. Smoothly but rapidly the river approaches the cliff, bounces off the sturdy wall of rocks, and then plunges angrily downstream in a series of wild rapids. It's a rare day a good fisherman doesn't score here.



A four pound smallmouth dwarfs a stringer of sunfish, all from the same river.

Midstream boulders are also good for bass and sunfish. Scattered along a fast river, they split the current and form quiet retreats on their lee sides. Fish like to rest here and wait for the churning current to bring them food. A good trick, though hard on the lure, is to bounce it off a boulder and let the current swing it tumbling into the eddy. Keep a tight line, and be prepared for a strike as it rolls into the quiet water.

Riffles are good for bass early and late in the day, though the fish are likely to be smaller than their mates of the deeper water. Most anglers fish riffles and rapids by casting diagonally across them, permitting the current to swing their lures downstream as they retrieve.

While pickerel and smallmouth bass often share a stream, the pickerel does not like fast water. It prefers quiet stretches rich with aquatic vegetation. Look for them in the deeper holes around weed beds and submerged logs. The lures already discussed will take pickerel, but in known pickerel waters the knowledgeable angler is likely to change to a red

and white spoon and string on a strip of pork rind.

Pickerel seem to come and go in smallmouth rivers. Extended periods of muddy water may drive them to the tributaries, with the river populations heaviest when the water is clear.

Sunfish and rock bass can be caught all over a river, though the sunfish tend to congregate in small patches of quiet water near the shoreline. Rock bass like shallow water, mild riffles and rocky areas of the stream.

Publicity, marinas, fishing camps and fast boats lure the modern angler to big waters. In fact many youngsters today get their introduction to fishing on lakes or reservoirs, and may never extend their angling interests beyond such waters. This is unfortunate, for the angler who does not learn to fish a stream is only half educated.

## JACK TODD MEMORIAL PARK

At the time of his death on December 10, 1967, Houston L. (Jack) Todd was the oldest active employee, in total years of service, of the Commission of Game and Inland Fisheries. He had served as game warden in Augusta County since his appointment to that position on April 1, 1934.

Now the Staunton-Augusta Chapter, Virginia Division, Izaak Walton League of America, of which Jack had long been a member, is honoring Warden Todd as a great sportsman, dedicated conservationist, and faithful law enforcement officer. In so doing the members of the chapter pay special tribute to his work with the young people of his community.

In a campaign begun May 1, the Staunton-Augusta



Jack Todd

Waltonians are raising funds to retire the remaining debt on their 150 acre park, which will then be renamed "The Jack Todd Memorial Park of the Staunton-Augusta Chapter of the Izaak Walton League of America." A bronze plaque in memory of Jack will be erected on the grounds. Contributions and pledges are being sent to Mr. Hensel T. Smith, Chapter Treasurer, Box 294, Staunton, Virginia 24401.

While he enforced the law conscientiously and impartially, as it was his duty to do, Jack's friends say he probably spent more time guiding people away from committing violations than he did in making arrests. That is a tribute he would have appreciated.



of all species except turkeys was curtailed.

The building of waterholes, planting of food and cover trees, and planting of shrubs have contributed, and still are contributing, materially to the maintenance of good wildlife habitat. During the sixties, however, the timber management programs of the National Forests have begun to play an ever increasing part in influencing the wildlife habitat. This is particularly true since the Forest Service has initiated a system of "even aged" timber management, whereby timber is regenerated in blocks up to several hundred acres in size. Growing trees can be compared to farming since it involves preparing the land, raising a crop and harvesting



Commission photo by Kesteloo

In the early days of the program clearings were hacked out by hand, in much the same way as the first settlers had cleared their home sites in the wilderness.

it. In even-aged timber management the harvest of a crop and the start of a new one are one operation. When the crop trees are cut, all else is taken out too so sunshine can reach the soil and start a new, even-aged crop. This is called clear cutting.

The trees are grown and harvested in areas of about 1,000 acres, called "compartments." The compartment is made up of smaller units of 20 to 200 acres and these are called "stands." Trees in a stand are approximately the same age and as each stand reaches about 70 to 80 years of age it is harvested and the cycle started over again. This type of forest management reduces considerably the need for creating and maintaining special wildlife clearings as a means of breaking up the cover and providing forest edge.

Over the thirty years that the cooperative agreement has been in operation a lot of changes have taken place. The same spirit of cooperation exists, though, as when wildlife management work was first initiated. Timber management has changed as the forests have matured and as new techniques have been adopted. Emphasis is now placed upon creating necessary wildlife clearings by coordinated wildlife management and timber harvest plans. Such direct wildlife management practices as are employed are looked at with a sharp eye on their economics. Plantings for wildlife still have an important place, and emphasis is now toward species requiring a minimum of care. Small water holes for wildlife are also receiving increasing emphasis.

New methods of increasing wildlife foods are being developed, such as grafting new fruiting species on established apple, crab and thornapple trees. Border plantings of autumn olive and other experimental wildlife foods are established

throughout the forest.

Fish management is also an important part of the program. Annually half a million or more adult trout are stocked in or adjacent to the forests. The creation of new fishing lakes, many of which are combination flood control impoundments with built-in recreational features, helps meet the increasing demand for public fishing.

Continual fish and game research is carried on as a part of the management programs. Many of the technological advances in our society offer new possibilities for improving forest game techniques. Research and experimentation is being carried on by the Virginia Cooperative Wildlife Research Unit, an organization jointly sponsored by the Virginia Commission of Game and Inland Fisheries, the U. S. Fish and Wildlife Service, the Wildlife Management Institute, and Virginia Tech. Studies carried out on the 10,000-acre Broad Run Area in the Jefferson National Forest probe such problems as evaluation of current wildlife and forest management practices; nutritional quality of browse plants; census methods; factors affecting wildlife distribution; and wildlife diseases.

Many challenges remain to be met in the management of the wildlife on the National Forests in Virginia. Increasing human population, bringing with it increasing pressures on wildlife resources, will require a constant search for new and better ways to manage fish and game. Ways of controlling, and in some cases limiting, hunting pressure; better ways of distributing hunting pressure; and a better harvest in line with the crop of game produced are only a few of the



Commission photo by Cutler

The development of water holes, where surface water is scarce, increases the productive acreage of forest wildlife habitat.

discernible needs.

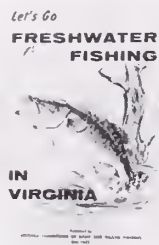
The next thirty years will see many more problems, but with cooperation as the key word in the program these problems will be met. Recreational developments planned for the future years on the Forests in addition to the hunting and fishing opportunities to be provided will have an increasing economic effect on the citizens of Virginia. In the years ahead Virginians will look back with even greater respect to the men who, in the 1930's, proved beyond doubt that they were "men of vision" when they grasped the opportunity to set in motion the machinery of Virginia's Cooperative Wildlife Plan.





Edited by HARRY GILLAM

## New Fishing Book Available



A new booklet entitled *Let's Go Freshwater Fishing in Virginia* is just off the press and jam packed with information for the novice and veteran fisherman alike. It includes a simplified presentation of license requirements, a state-wide survey of fishing waters—both lakes and streams, and what type of fishing they offer—plus a “what’s biting when” section which utilizes information gleaned from the Game Commission’s weekly fishing report to predict best times and best places to connect with the various fish species.

A colorful map helps the angler to locate the state’s main lakes and streams. A comprehensive section in the back of the book gives specific information on over 100 Virginia lakes open to public fishing, including where and how to get permits, boat regulations, boat availability and rental fees and seasons, plus information on camping and other related recreational facilities.

The 28-page booklet is available free from the Commission of Game and Inland Fisheries, P. O. Box 1642, Richmond, Virginia 23213.

## Hunting and Fishing Permit Sales Increase Slightly

State hunting and fishing permit sales increased slightly in fiscal year 1967 and the total income from them to the wildlife agencies edged upward to \$154 million, the Interior Department’s Bureau of Sport Fisheries and Wildlife has announced. The Bureau compiles the fiscal year figures from reports submitted by the 50 states.

The reports showed that 20 million hunting licenses, tags, permits and

stamps were issued in fiscal year 1967, about half a million more than a year earlier. Total fishing licenses, tags, permits and stamps issued increased from 26 million to 27 million in the same period.

Expenditures by hunters for these permits increased from \$77 million to \$81 million. For fishermen, the increase was from \$67 million to \$73 million. “These increases are small, but healthy,” Bureau Director John S. Gottschalk said, “demonstrating that fishing and hunting continue to be a major form of recreation in our society.”

Pennsylvania led all states in the number of hunting permits issued, while California far exceeded other states in fishing permits. Virginia ranked 21st in the number of fishing licenses sold and 13th in the number of hunting licenses.

## New Record Striper



R. H. Harris photo, South Hill  
Walter E. Echols, Jr., of South Hill reeled in this 29 pound 12 ounce striper from Gaston Lake, setting a new state record for the landlocked fish. The previous record was a 28 pound 12 ounce specimen taken from Lake Gaston in November of 1967. Echols landed the big striper on a spinning outfit.

## New Booklet Lists Private Recreational Assistance Sources

A new edition of *Private Assistance in Outdoor Recreation*, a directory of organizations providing aid to individuals and public groups, has been published by the Department of the Interior.

The 68-page booklet, compiled by the Bureau of Outdoor Recreation, lists the names and addresses of private organizations and associations which offer technical and educational recreation assistance for more than 20 categories of

activities. These range from archery to bicycle trails.

Listings include descriptions of the interests of the organizations, the types of technical assistance available, and some of their publications. The listed services often augment assistance available through city, county, state and federal agencies.

The booklet is designed to help landowners, organizations and private investors interested in developing outdoor recreation areas and facilities meet ever-increasing public recreational demands. The Bureau of Outdoor Recreation estimates that these demands will quadruple between 1960 and 2000.

*Private Assistance in Outdoor Recreation* is for sale for 30¢ by the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402.

## Game Commission Discontinues Certain Fee Publications

The Commission of Game and Inland Fisheries has discontinued a number of publications which have been made available to the public for a nominal fee. These publications will be replaced, in effect, by several new booklets and publications which will be distributed free.

Among those which are no longer available are a series of colored bird and mammal charts which formerly sold for \$2 per set, a booklet titled *Birdlife of Virginia* and a similar booklet, *Freshwater Fishing and Fishlife in Virginia*. Orders for these publications will be returned.

## Triple Trophies



Dan Adams, left, Judge John G. Sowder and John T. Eanes, all of Charles City County, proudly display three trophy gobblers they bagged in the county on the next to the last Saturday of the spring gobbler season. The birds ranged from 18¾ to 21¼ pounds.





# YOUTH AFIELD



Edited by ANN PILCHER

## Congratulations, Winners



After award presentations in the Senate Chamber and just before a city tour followed by luncheon at the Izaak Walton Park—winners stand on the steps of the Capitol in Richmond's April 26 sunlight with Lt. Governor Fred G. Pollard: Joanne E. Knutson, 11th grade, Wakefield High, Arlington; Janice Lynn Jolliffe, 9th, Culpeper High; Ellen Morris, 10th, King George High; Lynne Parker, 7th, Maury Elem., Fredericksburg; Phyllis D. Tomlin, 12th, Liberty High, Bedford; Helen E. Neal, 12th, Luray High; Betsy Lewis, 6th, Abingdon Elem., Wicomico; John Luzader, 8th, Marsteller Jr. High, Manassas; Grey Preston, 5th, Meadowview Elem. These top essayists each won \$50, except Miss Tomlin, whose award is an \$800 college scholarship. She holds plaque presented her by the Game Wardens Association for excellence of entry.

Photos by L. G. Kesteloo

For 21 years the Virginia Division, Izaak Walton League of America, and Commission of Game and Inland Fisheries have jointly sponsored an annual wildlife essay contest for Virginia children in grades 5-12. From the standpoint of student participation this year was the BEST EVER. Twenty thousand four students, representing 273 schools, wrote "Water Pollution" essays—2,222 more than ever submitted before. Thirty-seven of the schools had 100% participation by eligible students. Waltonians, game wardens and their supervisors, school teachers and principals—all deserve much of the credit for interesting young people in entering. A special "well done" goes to Essay Contest Coordinator Stuart O. Newman for his careful and thorough job of contest administration—part of his Field Educational Coordinator duties for the Game Commission—and to IWLA Virginia Division President Glenn C. Welten for his excellent assistance. Waltonians from several chapters also served as preliminary judges. Final judging was done by a representative of the League, Game Commission and State Department of Education. Awards of the 195 student winners scattered around the state totaled \$2650; an additional \$370 went to 100% schools.

This distinguished group accepted \$10 awards for the following 100% participation schools, whose principals are also listed: Immanuel Lutheran Elem., Alexandria (R. M. Behrens); Callaghan Elem., Covington (R. Lynn Graham); Falling Spring Elem., Hot Springs (W. S. Hodges); Deerfield Elem. (Mary S. Revercomb); Greenville Elem. (Francis M. Null); Westwood Hill Elem., Waynesboro (T. P. Southall); Bland Combined (R. R. Reynolds); Brunswick Academy, Lawrenceville (C. M. Saunders, Jr.); Gladesboro Elem., Hillsville (Ninevah J. Willis); Vaughan Jr. High, Fries (Lewis L. Fender); Venable Elem., Charlottesville (D. R. Crowe); Ettrick Elem. (Alberta F. Smith); Falling Creek Elem., Richmond (H. A. Richwine); Clarke Co. Intermediate, Berryville (J. B. Wilson); Stonewall Elem., Clearbrook (S. R. Koontz); Emporia Elem. (D. A. Barton); Cluster Springs Elem. (W. L. Lowe); Windsor High (H. M. Hill, Jr.); Jonesville Elem. (I. J. Chadwell); Wilton Elem., Hartfield (J. L. Whitley); Unionville Elem. (J. E. Brooks); McHarg Elem., Radford (G. W. Seagraves); Green Valley Elem., Roanoke (May M. Franklin); W. H. Keister Elem., Harrisonburg (R. E. Horst); Givens Elem., Swords Creek (F. W. Horton); Elk Garden Elem., Rosedale (Bertha Jackson); Grassy Creek Elem., Castlewood (C. C. Long); Swords Creek Elem., (S. G. Howard); Berkeley Elem., Spotsylvania (Frances O. Dunn); Chancellor Elem., Fredericksburg (E. I. Booth); Hayter's Gap Elem., Abingdon (Thelma Henderson); Highland View Elem., Bristol (R. P. Dugger); Holston High, Damascus (R. P. Cox); Highland Biltmore, Portsmouth (G. H. Mashburn); Luxford Elem., Virginia Beach (R. E. Edwards); Boyce Elem. (D. W. Naff).





# ON THE WATERFRONT



Edited by JIM KERRICK

## Winch Line Precautions

Most boaters pay little attention to the line on a boat trailer winch, yet the winch rope is indispensable for easy launching and haul-out.

The Mercury outboard boating authorities offer these hints for caring for your winch line:

Study the method by which the line is attached to the drum. Sometimes it helps to put several turns of friction tape around the metal clip or bolt head after the line has initially been attached, so that subsequent turns of the line will not be chafed or pinched.

Synthetic lines can suffer from long exposure to sunlight; when it is not in use for an extended period, cover the winch and its line with a cardboard box, paper bag or cloth which will keep off direct sunlight. Such a cover also wards off dust which, if allowed to become imbedded in the line, can cut its fibers. For the same reason, keep winch lines free of beach sand when hauling out a boat.

Check the winch rims. Are they smooth and nicely beveled outward so that rope will play onto the drum without snagging or chafing? Remember that the line is under considerable tension and rubs against the rims as it is wound onto the winch drum.

When storing your rig next winter, detach the line from the boat's bow eye, strip it off the drum and allow it to dry thoroughly. Then wind it back on lightly. If it's left on the drum under the tension placed upon it during the last haul-out, dampness may be retained. Even if the line is impervious to rot, the drum can rust. Also, fibers which are pinched and under tension can take on a permanent set if allowed to remain that way for months.

## Your Boat Anchor and How to Use It

Before you decide where you are going to anchor, be sure the water is of sufficient depth for your boat, but not too deep for the scope of your anchor line. Your boat should be headed

into the wind. The anchor line should be secured to the boat and coiled for free running. Many a skipper has been embarrassed because he failed to secure the anchor line to the boat. When securing the anchor line to the anchor or the boat, the fisherman's bend is a good hitch to use. The anchor should be lowered, not thrown into the water. Lower the anchor until it hits the bottom and slowly back your boat off until the anchor is secured. It is a good idea to observe the anchor for dragging for a period of approximately 15 minutes, and periodically thereafter to insure that the anchor is holding. The proper length of an anchor line may vary from 3 to 10 times the depth of the water, depending on weather and sea conditions. The more severe the weather, the longer your line should be. Mark your anchor line so you will know how much line you have out.



Photo Courtesy Evinrude Motors  
Improper and correct way to lower an anchor.

The Danforth and Northhill anchors are lightweight and have good holding power. Cans filled with cement or rocks do not make good anchors as they have a tendency to drag.

A trip line with a small buoy attached to the anchor enables you to tell where the anchor is located, and in the event your anchor should become snagged you can use the trip line to loosen it. This may save you the expense of losing an expensive anchor and line in the event you have to get underway quickly to avoid being caught in a squall or high winds.

An anchor and line are not required by the Boating Safety Law, but are recommended for your protection.

## Coping with Choppy Water

When a gravel road in resort territory gets too bumpy, a road scraper is brought in to smooth things over, but there's no device for leveling a choppy lake.

Getting a comfortable boat ride when the breeze is blowing depends on the boater's savvy at coping with a chop, observe the Mercury outboard boating experts.

Today's pleasure craft is designed to "plane," so that much of its bottom is not in contact with the water when underway. Often waves contact the hull bottom amidships—approximately beneath the seats. This can cause a bumpy ride.

To minimize this motion, bring the boat's bow down so the point where it contacts the water is well head of the seats; then the sharp vee of the prow can divide waves effectively. If your equipment includes Mercury's power trim, this can be accomplished by touching the control button.

The more primitive means of lowering the bow is to shift passengers and other movable weights, such as fuel tank, forward. You have to experiment to find the most effective trim, but don't try to achieve it by putting a heavy anchor in the bow locker where its bouncing can harm the interior finish.

It pays to experiment with motor tilt, too. Move the adjustment pin forward one hole at a time. Propeller thrust then lifts the stern more, puts the bow down and brings the sharp vee of the hull more into play. There may be some loss of efficiency, but on a long upwind run this trick results in a more comfortable ride.

If your boat begins to pound rather badly as you head into waves, the problem can be remedied by reducing speed. Or, it may help to cut into the waves at a slight angle, rather than take them head-on.



Bird  
of the  
Month:



## Blackburnian Warbler

By DR. J. J. MURRAY  
Lexington

THE Blackburnian is one of the most beautiful of our warblers. The colors of the male are black and white and brilliant orange. The pattern in which these colors are arranged is striking. In the male the throat and face are flaming orange. The orange is distributed in a band on the crown, a band around the eye area, widening below the eye, and on the whole area of the throat and upper breast. The lower underparts, a wide band on the wing, and much of the base of the tail are white. The rest of the head and back and tail is black, and there are black streaks on the sides. It is 5 to 5½ inches in length.

In the female the orange areas are duller and the white areas less extensive. To my taste, only the redstart and the prothonotary among the warblers can compare with the Blackburnian for brilliance. Dr. Elliott Coues, a prominent early American ornithologist, thought that "torch-bearer" would be a good name for this fiery-colored creature.

This warbler nests in Canada, in the far north of the eastern United States, and in high areas in the Alleghenies as far south as Georgia. In our Virginia mountains it nests mainly above 1500 feet. As a nester it is rare to uncommon in Shenandoah Park and elsewhere in the Blue Ridge, but much more common in our mountains west of the Valley. Elsewhere in the State it is a transient, rare on the coast, uncommon in the Piedmont, and quite common in the

Valley. Migrants pass through Virginia in early May and return in September.

Everything about this bird is striking except its song and its name. The name came from a Mrs. Blackburn of England. However, forgetting this otherwise unknown Mrs. Blackburn and taking the name as a description, the bird, as Alexander Sprunt has remarked, does have much black and its brilliant orange does burn like a flame.

The song is weak and uninspired. Peterson transcribes it as "zip zip zip zip titi tseeeeee." Another song which I have heard on Thunder Hill in Rockbridge County went "wee-see, wee-see, wee-see," with the accent on the "see."

The Blackburnian usually nests in conifers, but I remember seeing a nest at Mountain Lake, found on June 15, 1965 by members of the Brooks Bird Club of West Virginia, that was unusual in two respects. It was 50 feet high in the tree, 40 feet usually being considered the upper limit. There is a nest on record in New England at the remarkable height of 84 feet. The Mountain Lake nest was also unusual in that it was in a hickory, while the bird is supposed to nest almost entirely in conifers. However, birds do not always read the books, nor are they quite as mechanistic in behavior as is usually supposed.

Normally four eggs, dull grayish-white and marked with brownish, are laid. They are about two-thirds of an inch long and half an inch wide. The female does all the work on the nest, finishing it in about three days.

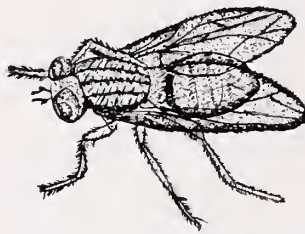
# WILDLIFE QUIZ

by William D. Rodgers Jr.

ANSWERS BELOW



1. THIS BLACK AND ORANGE BUTTERFLY IS KNOWN TO MORE AMERICANS AND SPREAD OVER MORE STATES THAN ANY OTHER BUTTERFLY. WHAT KIND IS IT ?



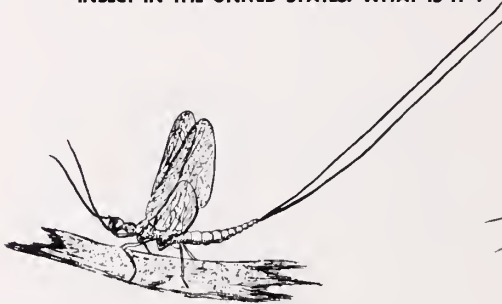
2. THIS INSECT CANNOT BITE OR STING AND CARRIES NO VENOM. IT IS A LOVER OF FILTH AND POLLUTION. IT HAS BEEN CALLED THE MOST DANGEROUS INSECT IN THE UNITED STATES. WHAT IS IT ?



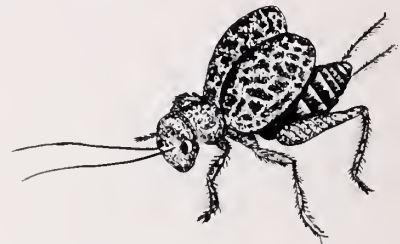
3. THIS WOOD AND PAPER CONSUMING INSECT DESTROYS MORE PROPERTY THAN ANY OTHER INSECT KNOWN TO MAN. IT IS USUALLY FOUND IN WARMER STATES. WHAT IS IT ?



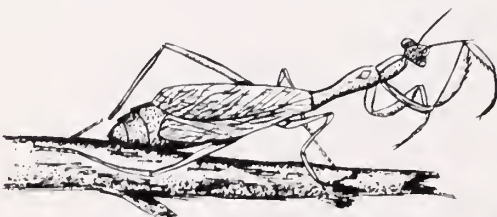
4. THIS INSECT IS FOUND FROM COAST TO COAST AND IT MAKES ITS HOUSE FROM PAPER. IT CHEWS WOOD MIXED WITH SALIVA AND MAKES IT INTO PAPER. IT CAN ALSO GIVE YOU A PAINFUL STING. WHAT IS IT ?



5. THIS INSECT HAS THE SHORTEST LIFE EXPECTANCY OF ANY INSECT KNOWN AND IS WELL KNOWN TO THE FISHERMAN. YOU CAN USUALLY FIND AN ARTIFICIAL FLY OF THIS TYPE IN A TACKLE BOX. WHAT IS IT ?



6. THE CHIRP OF THIS INSECT IS KNOWN TO ALMOST EVERYONE FROM COAST TO COAST. IT IS USED FOR FISH BAIT AND MAKES ITS CHIRPING SOUND WITH ITS HIND LEGS. IT THRIVES YEAR ROUND IN THE SOUTHERN STATES. WHAT IS IT ?



7. THIS INSECT CAN'T MAKE ANY SOUND; IT IS VOICELESS. IT IS THE ONLY INSECT KNOWN THAT CAN TURN ITS HEAD LIKE A MAN. WHAT IS IT ?



8. THIS INSECT ATTACKS CORN, WHEAT, MILLET, AND MANY OTHER PLANTS. THERE ARE MORE THAN 1300 SPECIES OF THIS BUG. IT SUCKS THE SAP FROM THE ROOTS AND KILLS THE PLANT. WHAT IS IT ?



9. THIS INSECT IS ONE OF THE LARGER GROUP AND IS A BLOOD THIRSTY KILLER TO LIVING PREY. IT HAS A WEAPON LIKE AN ARM THAT REACHES OUT FROM BENEATH ITS BODY TO GRAB ITS PREY. WHAT IS IT ?